DOCUMENT RESUME

ED 292 916 UD 026 085

AUTHOR Ralph, John
TITLE Planning Paper for the Center on the Study of the Education of Disadvantaged Students.
INSTITUTION Office of Educational Research and Improvement (ED), Washington, DC. Office of Research.
PUB DATE Mar 88
NOTE 35p.
PUB TYPE Information Analyses (070) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Classroom Techniques; Community Role; *Educationally Disadvantaged; *Educational Research; Elementary Secondary Education; Family Environment; *High Risk Students; *Influences; *Instructional Effectiveness; Language Skills; Poverty; *School Effectiveness; Social Influences; Teacher Characteristics

ABSTRACT

This planning paper offers background information and recommendations for the establishment of a research center for the study of educating the disadvantaged. It is based on a seminar comprised of educational researchers held to consider how low achieving students can best be helped. The research agenda for such a center should consider the following four factors in the lives of educationally disadvantaged students: (1) classroom and instructional factors; (2) school factors; (3) home or family factors; and (4) community factors. Recent research on effective schools must be consulted, the variables within these models are especially critical for high educational attainment among disadvantaged youth. Successful innovations will have positive effects on low, average, and high achieving students as well as those at risk. The research program for a special study center should have the following characteristics: (1) sensitivity to interaction effects; (2) cross-disciplinary approach; (3) sensitivity to the need for early identification; and (4) sufficient scope and rigor to allow the findings to be generalized to disadvantaged youth anywhere. A 54-item bibliography is included. (VM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

3-30-88

Office of Research

Planning Paper for the Center on the Study of the Education of Disadvantaged Students

ED292916

prepared by:

John Ralph
Office of Educational Research and Improvement
Office of Research
Room 617
555 New Jersey Avenue, NW.
Washington, DC 20208
(202) 357-6223

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

March 1988

Office of Educational Research and Improvement
U.S. Department of Education

UD026085

BEST COPY AVAILABLE

John Ralph
Office of Research, OERI
U.S. Department of Education

PLANNING PAPER FOR THE

CENTER ON THE STUDY OF THE EDUCATION OF DISADVANTAGED STUDENTS

Preface: In fiscal year 1989 the Office of Research plans to establish a research center for the study of educating disadvantaged children. The kinds of issues and the substantive research areas on which this center could concentrate are outlined in this paper. We invite your comments and advice to help us prepare the mission statement for the Center on the Study of the Education of Disadvantaged Students. By making this paper available, we are seeking external advice from the field which will stimulate our thinking.

Each center applicant would be expected to propose a research plan which strategically balances the most important questions against the research areas having the greatest potential for payoff. Four factors contribute to a child becoming educationally disadvantaged -- classroom or instructional factors, school factors, home or family factors, and community factors. For the purpose of framing a research agenda, these four factors are not equally important. Scholars can more readily investigate some research issues than others, and some research may have greater implications for policy than others.

Similarly, some research questions invite a long term plan for data collection and analysis while some questions can be answered by synthesizing the existing work.

A comprehensive research agenda maximizes the pursuit of questions which (a) will speak to the concerns of policy-makers; (b) will yield to the current methodologies of social science research; and (c) will strike a balance among the long-term interests in significant questions and topical interests for which short-term investigations are adequate.

Some Background. In October of 1986, the Office of Research invited a group of educational researchers to consider research issues related to schools with high concentrations of low income students. This seminar was based on a finding in the First Interim Report of the Congressionally mandated study of Chapter 1 (1986) which indicated lower achievement levels for children from both poor and nonpoor families in schools with high concentrations of poor families. Several themes emerged from that seminar meeting.

First, there is little systematic data on the problems of schools with high concentrations of low income families. Even the descriptive literature is based on case study evidence which extrapolates from a few sites to all urban schools or all schools in poor neighborhoods. Second, the participants suggested (a)

the problems encountered by high poverty schools and classrooms, while by no means insurmountable, are qualitatively different from the problems faced by predominately middle-class schools classrooms and (b) school ethos and the influence of peers on values and learning are critical challenges facing schools with high concentrations of low income students.

The discussion of seminar participants suggested a need for research that advances our knowledge of (a) instructional strategies that do the most to improve the achievement of students in schools with high levels of low income students and (b) how school staff can forge a school ethos based on a positive peer culture that contributes to student achievement. In the following sections of this paper we expand considerably on the issues raised in our seminar on schools serving high concentrations of poor families to include four factors which contribute generally to being educationally disadvantaged.

<u>Introduction:</u> Many studies have found that effective schools matter most for minority and disadvantaged youngsters who are especially sensitive to the quality and details of their school experiences (Alexander, Entwisle, and Thompson, 1987; Heyns, 1978; St. John, 1971). For this center we are defining the disadvantaged population to include those students who are likely to leave school (at whatever level or age) with an inadequate

level of basic skills (Slavin, 1988). This definitions carries several implications.

First, completing high school reduces the likelihood of failing to acquire basic literacy and numeracy skills, but dropping out of school, while often a symptom of failing to learn, is not coincident with being educationally disadvantaged. As the Young Adult Literacy Study has shown, five percent of the white dropout population demonstrate literacy skills higher than the average college graduate (Pendleton, A.J., 1987). Similarly, high school graduates who have inadequate reading and writing skills are also educationally disadvantaged.

Second, the population eligible for compensatory education programs is not synonymous with the population of disadvantaged children and youth. There is much to be learned from evaluation studies of Chapter 1, Head Start and Follow-Through but the complicated formulas which drive these programs and their implementation have tended to diffuse their impact and minimize their utility for research.

Third, by focusing on educational outcomes -- that is, failure to acquire basic skills -- many theoretical issues are left open as to the origin and causes of this condition. We are most concerned with the population that suffers from the cumulative disadvantages of independent at-risk factors -- growing up in

poverty, in a single-parent family, or in an inner-city neighborhood -- any one of which may be weakly correlated with school failure but together form a qualitatively more potent set of obstacles for academic success. This latter group has been identified as America's urban underclass or the "truly disadvantaged" (Wilson, 1987).

Fourth, this definition of the educationally disadvantaged retains the Secretary's concern for knowledge which can be applied in and around the formal education system. The focus is on schools and how schools, together with families and communities, can improve learning outcomes for disadvantaged children and youth.

What Factors Contribute to Being Educationally Disadvantaged?

There are four categories of factors that contribute to being at risk of failing to learn: Students without sufficient educational supports and experiences in either the classroom, the school, the home, or the community may be educationally disadvantaged (Natriello, McDill, Pallas, 1987). Ideally, a comprehensive research effort will address research issues within each area. But since these four areas vary widely in what is already known, the sophistication of past work, and the extent to which the important questions are researchable (because appropriate methods of analysis or tools of measurement may be

unavailable) the greater challenge may lie in tying these four diverse research areas into a unified program.

1. Classroom Effects. How can teachers and curriculum approaches be most effective for disadvantaged students?

This category includes research which is directed at improving instructional effectiveness for raising student achievement. In some ways it is the most controversial because it is the most refined methodologically -- and yet its overall potential for effecting significant school change is still widely debated among social scientists, not to mention teachers and principals.

Two strands of work are relevant for improving education for the disadvantaged population. One is based on meta-analyses of what works for all children. The other area is based on specifying the context in which interaction effects are observed between low-ability or low-SES children and academic performance.

For example, Hawley and Rosenholtz (1984) find, in broad terms, that effective teachers:

(a) optimize academic learning time,
(b) reward achievement in appropriate ways,
(c) utilize "interactive" teaching practices,
(d) hold and communicate high expectations for student performance, and
(e) select the appropriate unit of instruction.

Within this list, some variables have a differential impact for high and low ability students. For example, process-product

research has shown that the "appropriate unit of instruction" varies according to the student's ability-level; low ability students are more successful with material that allows for a higher percentage of correct answers (Brophy and Good, 1986). Another example lies in the use of teacher's praise: for high ability students praise should be less frequent, less effusive, and based on the relative complexity of the task. For low ability students praise should be more generous and tied more closely to the performance of individual tasks. Conversely, negative reinforcement or negative affect tends to slow the progress of low SES children more than for high SES pupils (Brophy, 1981).

Brophy and Good (1986) have summarized what we know about the relationships between socio-economic status and teaching effects:

> [L]ow-SES-low-achieving students need more control and structuring from their teachers: more active instruction and feedback, more redundancy, and smaller steps with higher success rates. This will mean more review, drill, and practice, and thus more lower-level questions. Across the school year, it will mean exposure to less material, but with emphasis on mastery of the material that is taught and on moving students through the curriculum as briskly as they are able to progress.

Brophy and Good also stress the importance of tailoring instruction to the classroom context:

> [E]ffective instruction involves selecting ... and orchestrating those teaching behaviors that are appropriate to the context and to the teacher's goals, rather than mastering and consistently applying a few "generic" teaching skills.

Even so, this body of research reveals which kinds of approaches are most effective: "The most consistently replicated findings link achievement to the quantity and pacing of instruction." The amount of instruction can be further analyzed by its practical dimensions: (a) opportunity to learn or amount of content covered, (b) proportion of time and overall academic emphasis in classroom activities, (c) efficiency in monitoring, pacing, and engaging students in academic work, (d) difficulty level of the materials (for maximizing learning rate), and (e) degree of active involvement with the teacher. Other studies have focused on the quality of teacher's lessons, but in general the findings on quantity of instruction are "stronger and more consistent than the findings on quality."

These findings are especially significant for disadvantaged youth in urban schools. Greenwood, Whorton, and Delquadri (1984) found that urban youth on average were engaged in significantly less academic interaction with teachers or peers than their counterparts in suburban schools. Suburban schools were estimated to provide an additional one and a half months of academic related activity compared to the average urban school. Similar findings have been reported related to suburban teachers' willingness to spend after school time (Rosenbaum, Rubinowitz and Kulieke, forthcoming) and, in schools with higher rates of poverty, less time spent on regular reading instruction (Final Report from the National Assessment of Chapter 1, 1987).

Aside from quantity of instruction, the instructional issues most critical for further research have been summarized by Stein, Leinhardt, and Bickel (1988):

> (1) direct instruction: a need to examine new forms which it might take in order to teach adequately higher-order cognitive skills; (2) in the process-product findings: the need to unpack generic variables in order to get at more fine-grained guides for practice; and (3) in cognitive strategies research: the need to address knowledge components of effective strategy use and the implementation requirements of various instructional approaches to strategy training.

The common element shared by all three concerns is the "need to address the content of instruction." For example, we have little particular knowledge about the application of process-product strategies to instruction in the basic academic areas of mathematics, literature, science, and history.

Of the critical research areas discussed by Stein, et. al., the impact of direct instruction on thinking skills (their first of three concerns) lies at the center of an important ongoing debate. Recent trends show improvements in "lower-order abilities," that are not reflected in higher-order, problem-solving cognitive skills (National Assessment of Educational Progress, 1988). Some researchers suggest there may be a tradeoff between "direct instruction" -- which seems to raise most effectively basic skills and the less scripted approach necessary to foster problem-solving and more analytical mental skills (Doyle, 1983). Stein, et. al. (1988) argue that direct

instruction has thusfar only been applied to developing lower-level skills; with more knowledge of "what comprises expertise in these more complex domains" direct instruction might also teach students how to write an interpretative essay.

There are three further areas within classroom-level research that are particularly relevant for the educationally disadvantaged: (a) research on language skills and student achievement, (b) recent research in the area of teacher background characteristics and student achievement, and (c) research in the area of curriculum differences and academic tracks.

Language skills. Many researchers have explored the link between home or "first language" skills and gains in both English language learning and school achievement. Much of the research bearing on language differences among disadvantaged youth has built on programmatic evaluations of bilingual education in its various forms (e.g., TBE versus immersion). The more general approach treats language ability as a general skill -- one which affects all disadvantaged youth and one which keenly shapes the general context for effective instruction (Fillmore, 1986; Willig, 1985).

It is of paramount importance for all children to become literate in standard English. Veltman (1983) and others have shown the

importance of exploring effective instructional practices for language minority youth who lack language skills both in English and in their primary language. Analyses of language skills and their bearing on school achievement should investigate the effects of confounding socio-economic factors which contribute to both language learning and school achievement (Baratz-Snowden and Duran, 1987).

Teacher characteristics. In the past researchers primarily investigated classroom effects by examining the effects of teacher background characteristics on student achievement. While pointing to the shrinking pool of qualified minority teachers, recent policy reports (such as the Holmes Group Report, 1986, and the Carnegie Forum on Education and the Economy Report, 1986) have brought new attention to the issue of teachers' backgrounds.

Past research generally failed to find substantial relationships between teacher traits and teacher competence, but some studies found a positive relationship between the verbal test scores of low-income minority students and teachers' verbal ability (Summers and Wolfe, 1977; Hanushek, 1977; Bruno and Doscher, 1981). Alexander, Entwisle, and Thompson (1987) have found high status (teachers from a high socioeconomic background) experience special difficulties relating to minority youngsters, but what matters is status differences between the student and the teacher rather than racial backgrounds. The impact of high socioeconomic

status teachers -- who form negative expectations and attitudes -- is greatest on the school performance of low SES black youngsters. Finally, some very recent results show teacher-related effects on children in the first grade with a greater impact on learning than the child's background and family variables (Pallas, Entwisle, Alexander, and Cadigan, 1987).

Curriculum differences. Differences in the content of instruction, especially between the instruction of low-achieving and high-achieving youth, remains a lively and difficult problem. At the secondary level, early research on tracking, without adequate controls for preexisting differences among students, overestimated its effect on student learning. There is still much debate over the measurement of ability, but the effect of the college track now appears to give only a slight advantage over noncollege track classes (Jencks and Brown, 1975; Alexander and Cook, 1982).

Gamoran (1987) has found that the differences in student achievement between college-bound and noncollege-bound tracks is greater than the differences in achievement between dropouts and nondropouts. While a dramatic comparison, this contrast may reflect the surprisingly high level of achievement among a portion of high schools dropouts. Gamoran also finds that differences in tracking or course-taking differences does not explain either race or ethnic differences in achievement:

> the gap between blacks and whites in the same programs of study is larger than the overall gap between blacks and whites. The Hispanic deficit shows indications of this pattern, but the fluctuations are much smaller.

There is clear evidence that track assignment does have an effect on aspirations and college entry which seems quite powerful. (Alexander and McDill, 1976). Moreover, there is a growing consensus that curricula at all school levels should be more uniform both over time and across classrooms. Past reforms, in the name of serving all youngsters, adapted new curricula for individual needs. A more fruitful strategy may be to meet individual needs with a common curriculum while adapting new pedagogical techniques designed to engage the hard-to-reach student (Graham, 1987).

In summary, we need to know which variables within models of effective instruction are especially critical for high educational attainment among disadvantaged youth. There are two strands of research which need further examination and synthesis. The one looks at specific classroom strategies which are especially effective for low SES or low ability students. Some of the important issues include differences between classrooms by the quantity of instruction, curricular content and its relationship to instructional strategy, hypothesized differences between effective instruction in higher-order thinking versus effective instruction in basic skills, effective strategies for learning English language skills, hypotheses that link who

teachers are to what teachers do, and the effects of courses and academic tracking.

2. The Influence of the School. How can school principals and administrative factors affect the learning of the educationally disadvantaged?

Traditionally, educational researchers thought of school-level processes as management issues only. Thus, a well run school may "shape" the academic work of classrooms but classrooms were still where students learned. The effective schools research gave new life to an old idea -- that schools have an ethos, a climate based on decisions about a school's overall academic emphasis and its skillful maintenance of order and purpose. Researchers now share the view that whole schools can be run effectively or not and that school-level variables can directly impact the educational experiences of students (Stedman, 1987).

The issue of school effectiveness is especially pertinent to the study of disadvantaged youth for two reasons. First, renewed interest in the effectiveness of whole schools began as researchers sought ways to improve inner-city schools. Its findings have focused on schools serving disadvantaged youth. Second, the findings of the National Assessment of Chapter 1 study (1986) show that students who attend high poverty schools achieve less, independent of the individual effects of family and

background. Third, when the "whole school" holds high expectations for disadvantaged youth -- which are then translated into rigorous academic programs -- there is evidence that school achievements rise along with school attendance and dropout rates (Bryk and Thum, 1987).

Yet despite the enduring intellectual appeal behind effective schools for disadvantaged youth, the research to date has yielded surprisingly little information (beyond anecdotal and small sample studies) about what schools look like in areas of concentrated poverty, how administrators make decisions, what effects different administrative choices may have, or a host of other descriptive data. Some recent work has begun to systematically describe what school principals generally do based on self-reports (Gottfredson, 1987; Dwyer, 1987). There are no "process data" -- for example, equivalent to the data gathered on teacher behavior and effects -- that indicates how links occur between administrative actions and teacher behavior or that indicates how principals' actions may directly impact on students' behavior.

What might a fine-grained analysis of principals' behavior reveal? The teacher and classroom effectiveness research clearly show how much effective instruction depends on contextual factors; it follows that principals can be crucial to having an effective school. Principals can influence teachers'

expectations of their students and encourage them to alter their standards; principals can influence teachers' choice of the particular instructional approaches most effective for a subject matter; principals can guide the formulation of reasonable and appropriate instructional objectives. Not least of all, principals can recruit capable teachers, work to retain the best, and ensure adequate preservice and in-service teacher education.

Conventional wisdom has it that the environment in which principals work varies greatly across schools and districts. Certainly the organizational environment within which public urban principals work differs from that of private and parochial schools, but we know little about the effects of administrative autonomy on the implementation and maintenance of effective school programs (cf. Chubb, 1988).

Similarly, principals may be critical for reducing dropout rates but there is little systematic information about effective programs or strategies. A report by the General Accounting Office (1986) concluded:

> It is not generally known "what works" in terms of specific programs that prevent students from dropping out of school or encouraging actual dropouts to reenter school and achieve a high school diploma.

Some evidence indicates that dropouts have little contact with counselors, teachers, or school officials of any sort prior to leaving school -- this despite GAO's finding that administrators believe "a caring and committed staff" to be among the most

important factors for reducing dropout rates (Finn, 1987; GAO, 1986; 1987).

The overarching research problem is that we don't have meaningful descriptions, definitions, or measures of school-level variables. Some analytical studies attempt to formulate context variables which describe the plight of high poverty schools (Natriello, 1986; Cusick, 1986; Metz, 1986) but new work is also needed to: (a) look at specific administrative practices and how they vary in relation to the needs and achievements of disadvantaged students in place of the current work based on self-reported goals and global assessments of the school's workings; (b) specify the effect of administrative practices on classroom behaviors of disadvantaged youngsters and their school achievements; (c) employ research designs that carefully distinguish how schools with high concentrations of disadvantaged students positively influence student progress from those that have less impact (cf. Good and Brophy, 1986).

Amid the many reforms underway in urban school districts (Oakes, 1987), we have examples of high performing schools in disadvantaged neighborhoods thriving alongside truly "bankrupt" schools. To be scientifically useful we need systematic descriptions and measures of effective and ineffective schools with special attention to the subset of effective and ineffective schools in very poor neighborhoods.

3. The Influences of the Home. How can schools enhance the contribution that a disadvantaged family has on the education of its children?

The term disadvantaged, as first used in the 1960s, tended to focus attention on the effects of family poverty on children's social and cognitive development. The earliest debates about whether disadvantaged children suffered from cultural deficits or cultural differences obscured how little we really know about the impact of home environments on school performance. To date, we have very little work that specifies the links between socio-economic status, family life and the effects on children's learning.

Some recent work has focused on teachers training parents to become educators. Bloom (1980) has argued that home-related variables, that is, the variables that describe the real-life processes by which parents help, encourage, and monitor their children's learning, are both powerful and alterable factors for predicting academic success. Clark's (1983) observations on the educational environments of poor black children allow us a glimpse at the dynamics of family relationships, but little is known about the optimal strategies, available to schools, for empowering parents to help their children -- much less the conditions under which parents not only can but do become better

teachers. Epstein (1984) has observed that single parents are as responsive to teacher initiatives as two-parent families but were also more dependent on teachers to show them what to do.

Other interesting avenues of work include research that explores efforts to "bind" the school more closely to the family. The appeal of Bronfenbrenner's (1979) work lies in the potential for schools to enhance community bonds among isolated families (1979). Similarly, the parent-contract approach of Henry Levin (in his accelerated learning model for disadvantaged children, 1987) may point to fruitful strategies for parent involvement in their child's education. Clearly, principals can encourage contact with teachers and staff by actively scheduling opportunities for direct parent involvement in their children's schooling.

Finally, the recent work by Coleman and Hoffer (1987) on "functionally deficient" and "structurally deficient" families draws a useful distinction between families that are functionally sound (child easily communicates with either the mother or father and receives encouragement to pursue educational goals) versus structurally sound (having a family made up by two parents with at least one parent at home). This distinction (and, for example, the findings that show the importance of church/community-supported schools over nonreligious private schools for keeping students in school) moves the research beyond

mechanistic conceptions of socio-economic status. In particular, it separates class standing from parental impact, making it possible to substitute specific family strengths and weaknesses for broad measures of SES. The result should be a more accurate measure of the educational impact of the family.

4. Community. How do communities and peer groups affect the education of disadvantaged youngsters?

Previous empirical work in this area is relatively sparse for researchers who want to analyze the effect of community variables on effective schooling; thus even the conceptual framework is still obscure. Coleman and Hoffer have emphasized the importance of "communities of families" or linkages among parents, teachers, and pupils (the more combinations the better) within a neighborhood and its school but the parameters of community support are unexplored. Do the rural poor have less community cohesion because of less frequent social contact or does the interdependence of rural life translate into a more supportive environment for school-related values and norms? When schools exist in suburban neighborhoods isolated from churches, businesses, and other gathering places, how far can schools alone go toward fostering shared values and commitments -- a community of parents that share and reinforce mutual educational purposes and values? Can the educational successes of certain immigrant

groups be explained by their "social capital" -- that is, their community-wide emphasis on academic work and achievement?

While not traditionally labelled a community variable, the study of peer environments represents another aspect of the local forces which impinge on the school and sanction students' behaviors. The academic effect of peer environment works in two directions. First, when there are many examples of academic achievement to serve as role models, the aspirations of all students tend to rise and higher achievements tend to follow. Conversely, a climate in which few students are high achievers tends to lower aspirations for all students and invites peer pressure for conformity to lower standards. At the same time, however, when students attend schools with high-achieving classmates they sometimes lose self-esteem and motivation because they cannot measure up by comparison to their competitors. The impact of "student composition effects" is greater on aspirations than achievement. The evidence on achievement effects suggests for black students, attending a high-achieving school may have a slightly positive effect, though for white students the effect is close to zero (Hurn, 1985).

More recent data have vividly portrayed the open hostility to academic work and learning by peer cultures in inner-cities (Fordham and Ogbu, 1987). The anti-school mindset can be especially potent when cultural differences lead to group

alliances, and, from there, norms of peer solidarity evolve into a culture naturally resistant to school authority and influence. Metz (1986) has observed a pattern in which young American Indian children approach school eager to learn but over time become sullen, uncooperative, and isolated within their peer group.

Future work needs to examine how effective schools tailor their approaches to local communities. What works -- that is, what may involve parents in their child's learning -- for one group or within one neighborhood may not work in another; and what effectively engages the local peer culture to promote learning may vary across communities.

Summary. Many researchers conclude that most successful innovations in classroom practices or school organization have positive effects on low- as well as average- and high- achieving students. Slavin (1988), for example, finds that research "tends to find that teacher behaviors which are successful with low achievers tend to be very similar to those successful with all students." Research focused on education for the disadvantaged, however, should always be alert for differences in treatment effects between low ability or low SES and high ability or high SES youth.

Second, future research needs to examine methods that apply to the educational experiences of children at-risk when the

educational context within the home, in the community, and at school may be dramatically different from the norm for all youth. In each of these three areas the research base is sparse and only a vague outline of a rather complex picture has emerged.

The key hypothesis here is whether researchers can specify classroom and school-level strategies -- within well-specified contexts such as grade-level or content area -- which enable teachers to meet the varying needs of students with wide differences in socioeconomic background, academic preparation, and learning ability. This suggests a research program that is:

- sensitive to interaction effects -- those processes which work differently or less well (or more powerfully) for the disadvantaged.

- cross-disciplinary in approach. The best safeguard for pursuing work of lasting consequence (and the widest credibility) is to draw from across disciplines for the methodological tools and theoretical frameworks that suit the research questions.

- sensitive to context such as achievement level, students' age, and content being taught. Learning problems for disadvantaged elementary-aged children are sharply different from the problems of poorly educated

adolescents -- which in turn are unlike the problems of poorly educated young adults. A full research agenda should be mindful of the arguments which weigh the merits of early identification and early intervention against more focused efforts to ease the symptoms of at-risk teenagers.

- based on data of sufficient rigor and scope that findings can be generalized to disadvantaged youth everywhere where we find them -- in poor rural schools, in large cities, and in private, parochial and public schools.

BIBLIOGRAPHY

Alexander, K.L. and M.A. Cook. 1982. "Curricula and Coursework: A Surprising Ending to a Familiar Story." American Sociological Review 47: 636.

Alexander, K.L., D.R. Entwisle, and M.S. Thompson. 1987. "School Performance and Status Relations." American Sociological Review 52: 665-682.

Alexander, K.L. and E. McDill. 1976. "Selection and Allocation within Schools." American Sociological Review 41:963-980.

Baratz-Snowden, J.C. and R. Duran. 1987. "The Educational Progress of Language Minority Students: Findings from the 1983-84 NAEP Reading Survey." National Assessment of Educational Progress, Educational Testing Service, Princeton, New Jersey.

Bloom, B.S. 1980. "The new direction in educational research: Alterable variables." Phi Delta Kappan 61: 382-385.

Bronfenbrenner, U. 1979. "Who Needs Parent Education?" Pp. 203-223 in Families and Communities as Educators, edited by Hope Jensen Leichter, New York: Teachers College Press.

Brophy, J.E. 1981. "Teacher Praise: A Functional Analysis." Review of Education Research 51: 5-32.

Brophy, J.E. and T.L. Good. 1986. "Teacher Behavior and Student Achievement." Pp. 328-375 in the Handbook of Research on Teaching, edited by Merlin C. Wittrock. New York: MacMillan Publishing.

Bruno, J.E. and M.L. Doscher. 1981. "Contributing to the harms of social isolation: Analysis of requests for teacher transfer in a large urban school district." Education Administration Quarterly 17: 93-108.

Bryk, A.S. and Y. M. Thum. 1987. "School Correlates of Absenteeism and Dropping-Out." Center on Educational Research, Madison, Wisconsin.

Carnegie Forum on Education and the Economy. 1986. A Nation Prepared: Teachers for the 21st Century. New York, New York.

Chubb, J.E. 1988. "Why the Current Wave of School Reform Will Fail." The Public Interest 90: 28-49.

Clark, R. 1983. Family Life and School Achievement: Why Poor Children Succeed or Fail. Chicago: University of Chicago Press.

Coleman, J.S. and T. Hoffer. 1987. Public and Private High Schools: The Impact of Communities. New York: Basic Books.

Cusick, P. 1986. "A Research Agenda for Understanding Low Income Low (Student) Performing Secondary Schools." Seminar presentation at the Seminar on Schools with High Concentrations of Low-income Students, Office of Research, U.S. Department of Education.

Doyle, W. 1983. "Academic Work." Review of Educational Research, 53: 159-200.

Dwyer, D.C., B.G. Barnett, and G.V. Lee. 1987. "The school principal: Scapegoat or the last great hope? In Leadership: Examining the Elusive, edited by L.T. Sheive and M.B. Schoenheit Cucamonga, CA: Association for Supervision and Curriculum Development.

Epstein, J.L. 1984. "Single Parent and the Schools: The effect of marital status on parent and teacher evaluations." Center for Social Organization of Schools, Baltimore, Maryland.

Fillmore, L.W. 1986. "Teaching Bilingual Learners." Pp. 648-685 in the Handbook of Research on Teaching, edited by Merlin C. Wittrock. New York: MacMillan Publishing.

Final Report from the National Assessment of Chapter One, 1987, Office of Research, Office of Educational Research and Improvement, U.S. Department of Education.

Finn, C.E. 1987. "The High School Dropout Puzzle." The Public Interest 87:3-22.

Fordham, S. and J. Ogbu. 1987. "Black Students' School Success: Coping with the Burden of 'Acting White.'" Urban Review 18.

Gamoran, A. 1987. "The Stratification of High School Learning Opportunities." Sociology of Education 60: 135-155.

General Accounting Office. 1986. "School Dropouts: The Extent and Nature of the Problem." Briefing Report of the U.S. General Accounting Office, Washington, D.C.

General Accounting Office. 1987. "School Dropouts: Survey of Local Programs." Briefing Report of the U.S. General Accounting Office, Washington, D.C.

Good, T.L., and J.E. Brophy. 1986. "School Effects." Pp. 570-602 in the Handbook of Research on Teaching, edited by Merlin C. Wittrock. New York: MacMillan Publishing.

Gottfredson, Gary D. and Lois G. Hybl. 1987. "An Analytical Description of the School Principal's Job." Report #13, Center for Research on Elementary and Middle Schools, The Johns Hopkins University, Baltimore, MD.

Graham, P.A. 1987. "Achievement for At-Risk Students." Unpublished paper prepared for Nation At-Risk Seminar on Education of the Disadvantaged. U.S. Department of Education, Washington, D.C.

Greenwood, C.R., D. Whorton, and J.C. Delquadri. 1984. "Tutoring methods." Direst Instruction News 3:4-7,23.

Hanushek, E. 1977. "The production of education, teacher quality and efficiency." In Educational Organization Administration, edited by D.A. Erickson. Berkeley, CA: McCutchan.

Hawley, W.D. and S.J. Rosenholtz. 1984. "Good Schools: What Research Says about Improving Student Achievement." Peabody Journal of Education 61.

Heyns, B. 1978. Summer learning and the effects of schooling. New York: Academic Press.

Holmes Group. 1986. Tomorrow's Teachers. East Lansing, Michigan.

Hurn, C.J. 1985. The Limits and Possibilities of Schooling. Boston: Allyn and Bacon, Inc.

Jencks, C.L., and M.D. Brown. 1975. "The Effects of High Schools on their Students." Harvard Educational Review 45:273-324.

Levin, Henry M. 1987. "Accelerated Schools for Disadvantaged Students." Educational Leadership 44: 19-21.

Metz, M.H. 1986. "Some Reflections on Qualitative Research Concerning Low Achievement of Poor Children." Seminar presentation at the Seminar on Schools with High Concentrations of Low-income Students, Office of Research, U.S. Department of Education.

National Assessment of Chapter 1. 1986. "Poverty, Achievement, and the Distribution of Compensatory Education Services." Interim Report, Office of Research, Office of Educational Research and Improvement, U.S. Department of Education.

National Assessment of Chapter 1. 1987. "The Current Operation of Chapter 1." Final Report, Office of Research, Office of Educational Research and Improvement, U.S. Department of Education.

National Assessment of Educational Progress. 1988. A.N. Applebee, J.A. Langer, and I.V.S. Mullis. Who Reads Best? Princeton, N.J.: Educational Testing Service.

Natriello, G. 1986. "Restructuring Secondary Schools for Disadvantaged Students." Seminar presentation at the Seminar on Schools with High Concentrations of Low-income Students, Office of Research, U.S. Department of Education.

Natriello, Gary, Aaron Pallas, and Edward McDill. 1987. "In Our Lifetime: The Educationally Disadvantaged and the Future of Schooling and Society." Research paper prepared for the Committee for Economic Development Subcommittee on the Educationally Disadvantaged.

Oakes, J. 1987. "Improving Inner-City Schools: Current Directions in Urban District Reform." Center for Policy Research in Education, The RAND Corporation, Santa Monica, California.

Pallas, A., D.R. Entwisle, K.L. Alexander, and D. Cadigan. 1987. "Children Who Do Exceptionally Well in the First Grade." Sociology of Education 60: 257-271.

Pendleton, A.J., 1987. "Adult Literacy and Schooling." Unpublished manuscript, Center for Education Statistics, U.S. Department of Education.

Rosenbaum, J.E., L.S. Rubinowitz and M.J. Kulieke. (forthcoming). Low-income Black Children in White Suburban Schools. Chicago: University of Chicago Press.

Slavin, R.E. 1988. "Students at Risk of School Failure: The Problem and Its Dimensions." Center for Research on Elementary and Middle Schools, The Johns Hopkins University, Baltimore, Maryland.

Stedman, Lawrence C. 1987. "It's Time We Changed the Effective Schools Formula." Phi Delta Kappan 69: 215-224.

Stein, M.K., G. Leinhardt, and W. Bickel. 1988. "Instructional Issues for Teaching Students at Risk." Learning Research and Development Center, Pittsburgh, Pennsylvania.

St. John, Nancy. 1971. "Thirty-six Teachers: Their Characteristics and Outcomes for Black and White Pupils." American Educational Research Journal 8:635-648.

Summers, Anita A. and Barbara L. Wolfe. 1977. "Do Schools Make a Difference?" American Economic Review 65:639-652.

Veltman, Calvin, 1983. Language Shift in the United States. New York: Mouton.

Willig, A.C. 1985. "A Meta-Analysis of Selected Studies on the Effectiveness of Bilingual Education." Review of Educational Research 55: 269-317.

Wilson, W.J. 1987. The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy. Chicago: University of Chicago Press.